

## New distributional information on Mexican birds III. Northern Oaxaca

by Emma Cisneros-Palacios & Carlos Bonilla-Ruz

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The Mexican state of Oaxaca has been studied intensively by ornithologists, beginning with Deppe in 1825, Sclater and Sumichrast in the latter half of the 19th century, and more recently by Phillips (1964), Rowley (1966, 1984) and Binford (1989). However, several areas remain almost completely unknown ornithologically, including the two regions of northern Oaxaca treated here, La Cañada (the arid northern part of the state representing a southerly continuation of the Valley of Tehuacán), and the Sierra de Huautla (Binford 1989). In conducting field surveys in these two areas, we recorded one new species for the state of Oaxaca, one new record for the northern half of the state, and one significant range extension. Below, we document these records and present partial avifaunal lists for the two areas investigated.

During several months of field work in 1990 and various outings in preceding years, field parties from the CIIDIR-Oaxaca visited nine localities in northern Oaxaca as part of ongoing studies of the terrestrial vertebrates in the state of Oaxaca. These localities were as follows:

In low tropical deciduous forest (Arid Tropical Scrub of Binford 1989) at La Cañada: (1) 1 km N, 1 km E San José del Chilar, 650 m, 17°43'N, 96°55'W; (2) 2 km E of locality 1, 1000 m; (3) Vicinity of Santiago Domingullo, 700 m, 17°39'N 96°54'W; (4) 3 km N, 3 km E San Pedro Jocotipac, at La Joya del Palmar, in cultivated land, 1700 m, 17°47'N, 97°02'W.

In the Sierra de Huautla: (5) Puerto de la Soledad in cloud forest, 2440 m, 18°09'N, 96°59'W; (6) 5.3 km N, 3.2 km E Teotitlán del Camino, gallery forest surrounded by humid oak forest, 1850 m, 18°10'N, 97°02'W; (7) Puente de Fierro in riparian sweetgum (*Liquidambar styraciflua*) forest with second-growth cloud forest on the surrounding slopes, 1650 m, 18°09'N, 96°51'W; (8) Maria Luisa in second-growth cloud forest, 1300 m, 18°12'N, 96°50'W.

Additional observations were made in the vicinity of Cerro San Felipe, 18.5 km N, 2.25 km W Oaxaca, in a riparian alder forest with arid pine-oak forest on the surrounding slopes. Vegetation types are based on maps from the National Institute of Statistics, Geography and Informatic (INEGI, maps E14-6 Orizaba and E14-9, Oaxaca), and on Rzedowsky's (1978) classification of Mexican vegetation. Observations were made during several days at each site, and voucher specimens were collected and deposited in the ornithological collection of CIIDIR-Oaxaca (OAX).

**ELF OWL** *Micrathene whitneyi*

On 21 March 1990, we collected a male Elf Owl (catalogue number OAX 123) at locality 3, in the canyon of an affluent of the Rio Grande, north of Santiago Dominguillo. On 15 June 1990, we took a female (OAX 124) at locality 2. Both localities support tropical deciduous forest with various species of *Bursera* and cacti such as *Neobuxbaumia* sp. and *Stenocereus weberii*. The male and female, respectively, had wing chords of 100.3 and 101.7 mm and weighed 32.9 and 26.2 g.

Binford (1989) mentioned this species as likely to be found in the state. Based on geographic distribution (Ligon 1968), these two specimens most likely pertain to the subspecies *whitneyi* of the Valley of Tehuacán, Puebla. Ligon (1968) suggested that this subspecies may be migratory, moving south between January and March, and that the breeding range may extend from Sonora south only to southern Puebla. Although the size of the gonads of the male was not recorded, and the ovary of the female was not greatly enlarged, the June collection date suggests that the Oaxaca population may be resident, since June is within the season of pairing and egg-laying documented by Ligon (1968). The holes used by the Elf Owls in Oaxaca most likely were excavated by the woodpecker endemic to the region, the Grey-breasted Woodpecker *Melanerpes hypopolius*, which was collected nearby at locality 1. The stomach of the male owl included the remains of Coleoptera, Hemiptera, Hymenoptera, Neuroptera and Scorpionidae, approximating the diet reported by Ligon (1968).

**VIOLET-CROWNED HUMMINGBIRD** *Amazilia violiceps*

On 16 June 1990 at San José del Chilar (locality 1), we collected two male Violet-crowned Hummingbirds. Binford (1989) mentioned Huajuapán (54.7 road km north-northeast, 1860 m [near Santiago Chazumba]), as the nearest locality, so this record extends the known geographic range by about 70 km and the collection dates by about one month.

**AMERICAN DIPPER** *Cinclus mexicanus*

On 14 September 1990, at Puente de Fierro (locality 7), we collected one male and one female American Dipper in a net suspended over a rushing stream. The size of the gonads of the male and female were, respectively,  $3 \times 1.5$  mm and  $8 \times 3$  mm. Another female was taken at our study site in the vicinity of Cerro San Felipe (see above) on 3 February 1986. These three specimens represent the first reliable records of the species from the northern part of the state (Binford 1989), filling a gap in the known distribution of the species.

*Other species*

In the following lists, numbers indicate the localities at which each species was encountered; asterisks denote those species recorded only by sight; and dates in parentheses are those of observation or collection in 1990.

Species detected in the four localities in La Cañada in low tropical deciduous forest were as follows: \**Coragyps atratus* 2 (14 Jun); *Zenaida*

*asiatica* 3 (21 Mar); *Columbina passerina* 1 (16 Jun); \**Geococcyx velox* 1 (15 Sept), 2 (23 Nov); *Micrathene whitneyi* 2 (21 Mar), 3 (15 Jun); *Amazilia violiceps* 1 (16 Jun); *Momotus mexicanus* 2 (15 Jun); *Chloroceryle americana* 1 (17–18 Jun); *Melanerpes hypopolius* 1 (16 Sep); *Sayornis nigricans* 1 (15–18 Jun); *Polioptila caerulea* 1 (16 Jun); *Turdus grayi* 1 (16–18 Jun, 24–29 Nov); *Turdus rufopalliatus* 1 (16 Jun); *Passerina versicolor* 1 (17 Jun); *Ammodramus savannarum* 4 (18 Mar); *Icterus pustulatus* 1 (16 Jun).

Species detected at localities in the Sierra de Huautla in montane forest included the following: *Campylopterus hemileucurus* 7 (14 Sep); *Colibri thalassinus* 5 (17 Oct); *Amazilia cyanocephala* 7 (14–15 Sep), 8 (20 Oct); *Amazilia beryllina* 7 (14 Sep); *Lampornis amethystinus* 5 (12 Sep); *Lamprolaima rhami* 5 (12 Sep, 17 Oct); *Eugenes fulgens* 5 (13 Sep, 17 Oct), 6 (17 Oct); *Trogon mexicanus* 6 (11 Sep); *Empidonax hammondi* 6 (18–20 Oct); *Empidonax difficilis* 7 (15 Sep); *Cinclus mexicanus* 7 (14 Sep); *Myadestes occidentalis* 5 (12–17 Sep, 17 Oct); *Catharus occidentalis* 5 (12 Sep); *Turdus assimilis* 5 (17 Nov); *Melanotis caerulescens* 6 (18 Oct); *Seiurus motacilla* 6 (18 Oct); *Oporornis tolmiei* 8 (20 Oct); *Wilsonia pusilla* 8 (20 Oct); *Basileuterus rufifrons* 8 (20 Oct); *Basileuterus belli* 5 (18 Oct); *Cyanerpes cyaneus* 7 (14 Sep); *Chlorospingus ophthalmicus* 5 (24 Mar, 12 Sep); *Atlapetes brunneinucha* 6 (21 Oct); *Carduelis psaltria* 8 (20 Oct).

The Sierra de Huautla list includes a number of species that are ecologically restricted to both cloud forest and humid pine-oak forest, such as *Lampornis amethystinus*, *Lamprolaima rhami*, and *Atlapetes brunneinucha*, but only two, *Campylopterus hemileucurus* and *Chlorospingus ophthalmicus*, are largely confined to cloud forest. Further ornithological exploration of the Sierra de Huautla is needed to determine if a well-developed cloud forest community exists there, as predicted by Binford (1989).

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#### References:

- Binford, L. C. 1989. A distributional survey of the birds of the Mexican state of Oaxaca. *Orn. Monogr.* no. 43, American Ornithologists' Union.
- Ligon, L. D. 1968. The biology of the Elf Owl, *Micrathene whitneyi*. *Misc. Publ. Mus. Zool. Univ. Mich.* no. 136: 1–70.
- Phillips, A. R. 1964. Notas sistemáticas sobre aves Mexicanas. III. *Rev. Soc. Mex. Hist. Nat.* 25: 217–242.
- Rowley, J. S. 1966. Breeding records of birds of the Sierra Madre del Sur, Oaxaca, Mexico. *Proc. West. Found. Vert. Zool.* 1: 107–204.
- Rowley, J. S. 1984. Breeding records of land birds in Oaxaca, Mexico. *Proc. West. Found. Vert. Zool.* 2: 73–224.
- Rzedowsky, J. 1978. *La Vegetación de México*. Ed. Limusa. México, D. F.

Address: Emma Cisneros-Palacios and Carlos Bonilla-Ruz, Centro Interdisciplinario de Investigaciones para el Desarrollo Integral Regional, Oaxaca (CIIDIR-Oaxaca), Apartado postal 24-Admon. 3, Oaxaca, Oaxaca, C.P. 68081, México.